

### **Remarks**

The Office Action mailed December 11, 2002 has been received and reviewed. Claims 6, 7 and 23 having been amended, claims 1-5 and 12-22 having been cancelled, and claims 24-28 having been added, the pending claims are claims 6-11 and 24-28. Reconsideration and withdrawal of the rejections are respectfully requested.

Claim 6 has been amended to remove reference to Ile-Tyr.

New claims 24-28 are supported by the originally filed application and specification.

### **The 35 U.S.C. §112, Second Paragraph, Rejection**

The Examiner rejected claims 1-11 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Examiner objected to the term "LipAr motif". This rejection is respectfully traversed because the specification clearly explains what is meant, which would be very clear to one of skill in the art. However, in the interest of expediting prosecution, claims with this language have been cancelled.

### **The 35 U.S.C. §102 Rejection**

The Examiner rejected claims 1-6 and 4-11 under 35 U.S.C. §102(b) as being anticipated by Ozeki (EP 0,347,890 A1) or (EP 0,347,890 B1); Goldstein (U.S. 4,505,853); and Yamada (WO 88/06039). The Examiner further rejected claims 1-4 as being anticipated by Cody (U.S. 5,382,569). These rejections are rendered moot in view of the amendments made herein.

### **Information Disclosure Statement**

Applicants filed Information Disclosure Statements on June 19, 2001 and on March 11, 2002. In regards to the Information Disclosure Statements, the Examiner stated:

Serial No. 09/600,432

Confirmation No. 3387

Filed: 10/02/02

For: PEPTIDES WITH  $\beta$ 1 INTEGRIN SUBUNIT DEPENDENT CELL ADHESION MODULATING ACTIVITY

- "*EP 0,576,898A3 was stricken from the IDS because the copy of the document that was provided is incomplete*". Applicants include a complete copy herewith.
- "*The ATCC 25923 reference was stricken from the IDS because the information contained at the website may be transient*". The Examiner did not consider the ATCC 25923 reference document submitted in the Information Disclosure Statement filed March 11, 2002, indicating this is a transient document. Applicants submit, however, that such documents may be considered in an Information Disclosure Statement.

Under M.P.E.P §2128, "[a]n electronic publication including an on-line database or Internet publication, is considered to be a 'printed publication' within the meaning of 35 U.S.C. 102(a) and (b) provided the publication was accessible to persons concerned with the art to which the document relates." Furthermore, according to In re Wyer, a document is proven to be a "printed publication" upon satisfactory showing that such document has been disseminated or otherwise made available to extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it..." (210 USPQ 790 (CCPA 1981)). Also, "the one who wishes to characterize the information, in whatever form it may be, as a 'printed publication' . . . should produce sufficient proof of its dissemination or that it has otherwise been available and accessible to persons concerned with the art to which the document relates" Id. at 795. Finally, under M.P.E.P §2128, disclosures on the Internet requires a publication date or retrieval date to be relied upon as prior art.

The "ATCC 25923" document was retrieved from the following website [http://web.archive.org/web/\\*/http://uspto.gov](http://web.archive.org/web/*/http://uspto.gov), the retrieval date was 02/06/02. Applicants submit that they have provided sufficient proof of dissemination of these documents to persons concerned with the art and have provided retrieval dates of these documents. Applicants, therefore, respectfully request that the Examiner consider the ATCC 25923 document and that an initialed copy of the 1449 form, indicating that this document has been considered, be returned with the next Official Action.

- "*The remaining references were stricken from the IDS because they were not received*". Applicants include replacement copies herewith.

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It is believed that no fee is due, as the original Information Disclosure Statements were filed prior to the receipt of any Action on the merits. However, in the event a fee is due, please charge any fee or credit any overpayment to Account No. 13-4895.

Applicant's have enclosed herewith copies of the previously submitted 1449 forms, and a clean copy of the 1449 forms, indicating copies enclosed. Applicant's, therefore, respectfully request that the Examiner consider the enclosed documents and that initialed copies of the 1449 form, indicating that these documents has been considered, be returned with the next Official Action.

**Summary**

It is respectfully submitted that the pending claims 6-11 and 23-28 are in condition for allowance and notification to that effect is respectfully requested. The Examiner is invited to contact Applicants' Representatives, at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

The Examiner is invited to contact Applicants' Representatives at the below-listed telephone number, if they can be of any assistance during prosecution of the present application.

**CERTIFICATE UNDER 37 C.F.R. 1.10:**

"Express Mail" mailing label number:

EV183608050 US

Date of Deposit: \_\_\_\_\_

The undersigned hereby certifies that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

By: \_\_\_\_\_

Name: \_\_\_\_\_

March 11, 2003  
Date

Respectfully submitted for

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Amendment and Response – Appendix A

Serial No. 09/600,432

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For: PEPTIDES WITH  $\beta 1$  INTEGRIN SUBUNIT DEPENDENT CELL ADHESION MODULATING ACTIVITY

**APPENDIX A - SPECIFICATION/CLAIM AMENDMENTS  
INCLUDING NOTATIONS TO INDICATE CHANGES MADE**

Serial No.: 09/600,432

Docket No.: 110.113 0101

Amendments to the following are indicated by underlining what has been added and bracketing what has been deleted. Additionally, all amendments have been shaded.

**In the Claims**

For convenience, all pending claims are shown below.

6. (AMEND) The~~A~~ peptide of claim 1 having the sequence Pro-Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:24), Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:25), Ala-Arg-Ile-Tyr (SEQ ID NO:26), or~~or~~ Arg-Ile-Tyr for Ile-Tyr.

7. (AMEND) The peptide of claim 11~~6~~ wherein said peptide is capable of modulating J1 integrin subunit dependent adhesion.

8. The peptide of claim 7 wherein said peptide is capable of inhibiting J1 integrin subunit dependent adhesion.

9. The peptide of claim 7 wherein said peptide is capable of modulating I4J1 integrin dependent adhesion.

10. The peptide of claim 9 wherein said peptide is capable of inhibiting I4J1 integrin dependent cell adhesion.

11. The peptide of claim 10 wherein said peptide is capable of inhibiting I4J1 integrin dependent adhesion of Ramos cells to  $\alpha 4 \beta 1$  integrin binding fibronectin fragments.

23. (AMEND) A method for modulating the adhesion of cells to a substrate, the method comprising:

combining a peptide of claim 6 with a suspension of said cells to form a modified cell suspension, wherein the peptide has no more than about 6 amino acid residues and comprises a C-terminal LipAr motif; and

contacting the modified cell suspension with the substrate.

24. (NEW) A method of claim 23 wherein the peptide modulates J1 integrin subunit dependent adhesion.

25. (NEW) The method of claim 24 wherein the peptide inhibits J1 integrin subunit dependent adhesion.

26. (NEW) The method of claim 25 wherein the J1 integrin is I4J1.

27. (NEW) The method of claim 24 wherein the J1 integrin is I4J1.

28. (NEW) A method of inhibiting I4J1 integrin dependent adhesion of cells to integrin-binding fibronectin fragments, the method comprising:

combining a peptide of claim 6 with the cells to form a modified cell suspension; and  
contacting the modified cell suspension with the integrin-binding fibronectin fragments.